

REMARKS

Applicants appreciate the withdrawal of several rejections, and the indication that the claims would be allowable if several informalities were corrected. Applicants propose to amend claims 37-49, 51-54 and 57. A marked-up copy of the claims is attached. Claims 37-57 remain pending. Support for the amended claims can be found throughout the specification as filed. See, for instance, page 4, lines 23-27 and page 16, lines 6-10 concerning amino acids with chemically reactive side chains.

Although applicants believe that the previous language was definite, applicants propose the present amendments to address the examiner's concerns. Applicants respectfully request that the rejections set forth in paragraphs 5a-c of the final office action be withdrawn.

Request

Applicants submit that the claims are in condition for allowance, and respectfully request favorable consideration to that effect. The examiner is invited to contact the undersigned at (202) 912-2000 should there be any questions.

Respectfully submitted,



John P. Isacson
Attorney for Applicant
Reg. No. 33,715

February 13, 2003

Date

Heller Ehrman White & McAuliffe LLP
1666 K Street, N.W., Suite 300
Washington, D.C. 20006-4004
Telephone: (202) 912-2777
Facsimile: (202) 912-2020



26633

Marked-up Copy of Amended Claims

37. (Five times amended) **[An SCR3 derivative]** A polypeptide having only a partial **[SCR3]** sequence from short consensus repeat 3 of complement receptor 1, wherein the **[SCR3 derivative]** polypeptide comprises a 6 to 23 amino acid portion of SEQ ID NO: 1, and wherein the **[SCR3 derivative]** polypeptide has at least one amino acid sequence selected from the group consisting of:

- (a) amino acids 6-11 OF SEQ ID NO: 1, and
- (b) amino acids 11-20 of SEQ ID NO: 1.

38. (Three times amended) The **[SCR3 derivative]** polypeptide according to claim 37, further comprising a cysteine residue at the carboxyl terminus and the amino terminus of the polypeptide, thereby providing a capability to form a cyclic polypeptide via formation of a disulfide bond.

39. (Four times amended) The **[SCR3 derivative]** polypeptide according to claim 37, further comprising a **[chemically reactive]** amino acid residue with a chemically reactive side chain located at least one position selected from the group consisting of the carboxyl terminus and the amino terminus of the polypeptide, wherein the amino acid residue with a chemically reactive side chain is selected from the

group consisting of cysteine, lysine, glutamic acid, arginine, asparagine, glutamine, tryptophan, serine, threonine and aspartic acid.

40. (Three times amended) The **[SCR3 derivative]** polypeptide according to claim 39, wherein the **[chemically reactive]** amino acid residue **with a chemically reactive side chain** is derivatized or derivatizable.

41. (Three times amended) The **[SCR3 derivative]** polypeptide according to claim 40, wherein the terminal amino acid residue is cysteine derivatized with S-(2-pyridyl) dithio.

42. (Three times amended) The **[SCR3 derivative]** polypeptide according to claim 37, wherein the polypeptide is altered to remove **[chemically reactive]** amino acid residues **with chemically reactive side chains**.

43. (Five times amended) A multimeric **[SCR3 derivative]** polypeptide having only a partial **[SCR3]** sequence **from short consensus repeat 3 of complement receptor 1**, wherein the **[SCR3 derivative]** polypeptide comprises at least two polypeptide constituents that comprise a 6 to 23 amino acid portion of SEQ ID NO: 1, and wherein the polypeptide constituents have at least one amino acid sequence selected from the group consisting of:

(a) amino acids 6-11 OF SEQ ID NO: 1, and

(b) amino acids 11-20 of SEQ ID NO: 1, wherein the polypeptide constituents do not comprise a mature short consensus repeat-3 and the polypeptide constituents are linked to a core structure.

44. (Three times amended) The multimeric **[SCR3 derivative]** polypeptide according to claim 43, wherein the core structure comprises a derivative of lysine.

45. (Twice amended) The multimeric **[SCR3 derivative]** polypeptide according to claim 43, wherein the core structure is (lys)₄(lys)₂ lys ala or Tris (aminoethyl) amine and 1,2,4,5 benzene tetracarboxylic acid.

46. (Twice Amended) The multimeric **[SCR3 derivative]** polypeptide according to claim 43, wherein the multimeric polypeptide comprises two to eight **[SCR3-derived]** polypeptides having only a partial sequence from short consensus repeat 3 of complement receptor 1.

47. (Twice amended) The multimeric **[SCR3 derivative]** polypeptide according to claim 43, which comprises (Lys)₄ (Lys)₂ Ala-OH) linked through N-(ε-thiopropionyl) linkers that are disulfide bonded to cysteine thiol of the polypeptide SGGRKVFELVGEPsiYC.

48. (Five times amended) A chimeric polypeptide comprising a host protein and as an insert **[an SCR3 derived]** a polypeptide having only a partial **[SCR3]** sequence **from short consensus repeat 3 of complement receptor 1**, wherein the **[SCR3 derivative]** polypeptide **having only a partial sequence from short consensus repeat 3 of complement receptor 1** comprises **[comprises]** a 6 to 23 amino acid portion of SEQ ID NO: 1, wherein the **[SCR3 derived]** polypeptide **having only a partial sequence from short consensus repeat 3 of complement receptor 1** has at least one amino acid sequence selected from the group consisting of:

(a) amino acids 6-11 of SEQ ID NO: 1, and

(b) amino acids 11-20 of SEQ ID NO: 1,

wherein the **[SCR3 derived]** polypeptide **having only a partial sequence from short consensus repeat 3 of complement receptor 1** is inserted into a non-essential region of the host protein.

49. (Amended) The chimeric polypeptide according to claim 48, wherein the host protein contains at least one **[SCR]** **short consensus** repeat **of complement receptor 1**.

51. (Three times amended) The **[SCR3 derivative]** polypeptide according to claim 37, wherein the **[SCR3 derivative]** polypeptide is selected from the group consisting of:

linear CNPGSGGRKVFELVGEPsiYC (SEQ ID NO: 4);

cyclic CNPGSGGRKVFELVGEPsiYC (SEQ ID NO: 4);

SGGRKVFELVGEPsiYC (SEQ ID NO: 5);

CGGRKVFC (SEQ ID NO: 7); and

FELVGEPsiYSTSNDDQVGiWSG (SEQ ID NO: 8).

52. (Five times amended) A process for preparing **[an SCR3 derivative]** a polypeptide having only a partial **[SCR3]** sequence from short consensus repeat 3 of complement receptor 1, wherein the **[SCR3 derivative]** polypeptide comprises a 6 to 23 amino acid portion of SEQ ID NO: 1, and wherein the **[SCR3 derivative]** polypeptide has at least one amino acid sequence selected from the group consisting of:

(a) amino acids 6-11 of SEQ ID NO: 1, and

(b) amino acids 11-20 of SEQ ID NO: 1, comprising the step of:
condensing peptide units.

53. (Five times amended) A process for preparing **[an SCR3 derivative]** a polypeptide having only a partial **[SCR3]** sequence from short consensus repeat 3 of complement receptor 1, wherein the **[SCR3 derivative]** polypeptide comprises a 6 to

23 amino acid portion of SEQ ID NO: 1, and wherein the **[SCR3 derivative]** polypeptide has at least one amino acid sequence selected from the group consisting of:

(a) amino acids 6-11 of SEQ ID NO: 1, and

(b) amino acids 11-20 of SEQ ID NO: 1, comprising the step of:
expressing DNA encoding the polypeptide in a recombinant host cell, and recovering the polypeptide.

54. (Five times amended) An isolated polynucleotide encoding **[an SCR3 derivative]** a polypeptide having only a partial **[SCR3]** sequence from short consensus repeat 3 of complement receptor 1, wherein the **[SCR3 derivative]** polypeptide comprises a 6 to 23 amino acid portion of SEQ ID NO: 1, and wherein the **[SCR3 derivative]** polypeptide has at least one amino acid sequence selected from the group consisting of:

(a) amino acids 6-11 of SEQ ID NO: 1, and

(b) amino acids 11-20 of SEQ ID NO: 1.

57. (Five times amended) A pharmaceutical composition comprising

(1) a therapeutically effective amount of **[an SCR3 derivative]** a polypeptide having only a partial **[SCR3]** sequence from short consensus repeat 3 of

complement receptor 1 , wherein the **[SCR3 derivative]** polypeptide comprises a 6 to 23 amino acid portion of SEQ ID NO: 1, and wherein the **[SCR3 derivative]** polypeptide has at least one amino acid sequence selected from the group consisting of:

- (a) amino acids 6-11 of SEQ ID NO: 1, and
- (b) amino acids 11-20 of SEQ ID NO: 1, and
- (2) a pharmaceutically acceptable carrier or excipient.